



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,270	12/06/2001	Harold J. Plourde JR.	A-7182	5626

5642 7590 02/08/2006

SCIENTIFIC-ATLANTA, INC.
INTELLECTUAL PROPERTY DEPARTMENT
5030 SUGARLOAF PARKWAY
LAWRENCEVILLE, GA 30044

EXAMINER

WILDER, PETER C

ART UNIT	PAPER NUMBER
----------	--------------

2614

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/010,270	Applicant(s) PLOURDE ET AL.	
	Examiner Peter C. Wilder	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14, 18-22, 24-37, and 41-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Browne et al. (WO 92/22983).

Referring to claim 1, Browne teaches a system for managing the allocation and storage of media content instance files in a hard disk of a storage device coupled to a media client device in a subscriber television system, comprising:

a memory for storing logic (Page 14 lines 7-8 teaches a controller element 105 in Figure 1 having memory and Page 18 lines 1-6 and Figure 2-11 teaches the controller operating the remote device which would have to be done with a program or logic of some kind);

a buffer space in the hard disk for buffering media content instances as buffered media content instance files (Page 20 last paragraph);

and a processor (Page 13 third paragraph) configured with the logic to track the size of permanent media content instance files and the buffered media content instance files to provide an indication of available free space, such that

Art Unit: 2614

the indication is independent of the buffer space (Page 24 last two lines and page 25 first two lines and Figure 6 upper right hand corner teach an indication of free space in storage section 104 and Page 7 last paragraph teaches a FIFO buffer element 104c being implemented and programs that are retained are moved to storage 104, so the available free space is separate from the buffer space).

Referring to claim 2, corresponding to claim 1, Browne teaches the system, wherein the processor is further configured with the logic to provide a user interface (Page 13 third paragraph teaches Figures 2-11 as user interfaces), responsive to a user input (Page 13 third paragraph teaches a user control section and to control you need user input), wherein the user interface provides the indication of available free space for permanently recording media content instances (Figure 6 upper right hand corner), wherein the permanently recorded media content instances are configured as the permanently recorded media content instance files (Page 24 last paragraph and page 25 lines 1-2 teaches element 600 in Figure 6 which shows individual programs stored in element 104 which would be files in memory 104).

Art Unit: 2614

Referring to claim 3, corresponding to claim 2, Browne teaches wherein the permanently recorded media content instance files can be deleted from the storage device (Page 25 lines 3-6).

Referring to claim 4, corresponding to claim 2, Browne teaches the system, wherein the user input is implemented with a remote control device (Page 18 lines 1-4 teaches a remote control).

Referring to claim 5, corresponding to claim 2, Browne teaches the system wherein the permanently recorded media content is from the buffer space (Last paragraph starting on page 7 going onto page 8).

Referring to claim 6, corresponding to claim 2, Browne teaches the system of claim 2, wherein the permanently recorded media content is a scheduled recording initially written to non-buffer space (Page 24 second and third paragraphs teach setting up a recording and the recorded program being stored in section 104 which is a non-buffer space)

Referring to claim 7, corresponding to claim 1, Browne teaches the system of claim 1, wherein the buffer space, the available free space, and permanently recorded space are located on the hard disk (Page 10 last paragraph and page 11 teach magnetic disks/hard disks storing data for storage section 104, Page 20

Art Unit: 2614

last paragraph teaches a buffer space being allocated from storage section 104, and Page 24 last two lines and Page 25 first two lines teach the free space in storage area 104).

Referring to claim 8, corresponding to claim 1, Browne teaches the system wherein the buffer space and permanently recorded space are allocated from the free space on the hard disk (Page 20 last paragraph and page 21 and Figure 3 teach the buffer space being allocated from the general storage on 104, Page 24 third paragraph teaches storing recorded programs in section 104, and Page 24 last two lines and Page 25 first two lines teach the free space in storage area 104, so the permanently recorded area is allocated for free space).

Referring to claim 9, corresponding to claim 1, Browne teaches the system of wherein the buffer space and permanently recorded space have physical locations on the hard disk (Last paragraph on page 20 teaches a buffer being a portion of storage section 104 (from page 7 fourth paragraph the buffer known as 104c), and page 24 third paragraph teaches permanently recorded programs being part of storage section 104 and page 11 lines 2-3 teaches a magnetic disk comprising storage section 104 so the buffer section 104c thus physical locations have to exist for the buffer and permanently recorded spaces)

Referring to claim 10, corresponding to claim 1, Browne teaches the system, wherein the buffer space and the available free space is measured in

Art Unit: 2614

units of time (Page 8 lines 6-8 teaches programs that are stored as permanently are added to program list 600 out of buffer 104c and Page 24 last two lines and page 25 lines 1-2 and Figure 6 upper left corner teach the available free space in time as part of storage unit 104 in terms of non-buffer space since the programs in 104 are listed in program list 600, Page 20 last paragraph and page 21 along with Figure 3 element 305b teach the buffer space allocation in time units).

Referring to claim 11, corresponding to claim 1, it is inherent the system of Browne, wherein the buffer space and the available free space is measured in units of hard disk space (Page 24 last two lines and Page 25 first two lines and Figure 6 upper right corner teaches measuring the available free space in units of time; to calculate this time the recorder system has to measure the available free space and then use a recording time to recording bit rate ratio in order to calculate the available free space in units of time; This same process has to also occur for the buffer space with regards to Figure 3 element 305b).

Referring to claim 12, corresponding to claim 1, Browne the system of wherein the processor is further configured with the logic to buffer analog broadcast media content instances, received at a communications interface, as digitally compressed media content instances (Page 10 lines 8-18 teaches receiving an analog signal converting it to digital and compressing the digital

Art Unit: 2614

signal, Page 10 last paragraph teaches storing the compressed data in storage section 104, and Page 20 last paragraph teaches that storage section 104 can have a portion of the storage area act as a FIFO buffer; Page 18 first paragraph teaches a microprocessor element 105 controlling the recorder player and controlling the program source, channel, and recording time which mean the user can control what is buffered through the processor so the processor has to have logic in order to function).

Referring to claim 13, corresponding to claim 1, Browne teaches the system of wherein the processor is further configured with the logic to buffer an analog signal received at a connector from a consumer electronics device, as a digitally compressed media content instance (Page 10 lines 8-18 teaches receiving an analog signal converting it to digital and compressing the digital signal, Page 10 last paragraph teaches storing the compressed data in storage section 104, and Page 20 last paragraph teaches that storage section 104 can have a portion of the storage area act as a FIFO buffer; Page 18 first paragraph teaches a microprocessor element 105 controlling the recorder player and controlling the program source, channel, and recording time which mean the user can control what is buffered through the processor so the processor has to have logic in order to function; Page 9 second paragraph teaches a input signal can come from a VCR).

Art Unit: 2614

Referring to claim 14, corresponding to claim 1, Browne the system of wherein the processor is further configured with the logic to buffer digital broadcast media content instances, received at a communications interface, as digitally compressed media content instances (Page 11 second paragraph teaches receiving pre-compressed digital data and storing the compressed data in storage section 104, and Page 20 last paragraph teaches that storage section 104 can have a portion of the storage area act as a FIFO buffer; Page 18 first paragraph teaches a microprocessor element 105 controlling the recorder player and controlling the program source, channel, and recording time which mean the user can control what is buffered through the processor so the processor has to have logic in order to function).

Referring to claim 18, corresponding to claim 1, Browne teaches the system wherein the processor is further configured with the logic to determine the available free space after subtracting buffer space capacity from total disk space (Figure 6 upper left hand corner displays the space left in storage unit 104, Page 20 last paragraph teaches allocating a fixed portion of storage area 104 for a FIFO buffer, Page 8 lines 6-8 teach the FIFO buffer 104c being considered separate from storage area 104 and storage area 104 being represented by a list 600, Page 24 last two lines and page 25 first two lines teaches displaying the amount of free space in storage area 104 with regards to list 600, Page 13 third paragraph teaches a processor controlling recorder player 100).

Art Unit: 2614

Referring to claim 19, corresponding to claim 1 Browne teaches the system of wherein the processor is configured with the logic to reduce the available free space by the amount of the space used for the permanent media content instance files (Page 24 last two lines and page 25 first two lines and first paragraph on teaches displaying the remaining space in storage section 104 with regards to list 600 and the processor element 105 updating the list 600 when a program is removed so the available free space in section 104 would be updated with a space increase, a space decrease would occur if a program were added).

Referring to claim 20, corresponding to claim 1, Browne teaches the system of wherein the processor is configured with the logic to increase the available free space by the amount of the space recovered from a deleted permanent media content instance files (Page 24 last two lines and page 25 first two lines and first paragraph on teaches displaying the remaining space in storage section 104 with regards to list 600 and the processor element 105 updating the list 600 when a program is removed so the available free space in section 104 would be updated with a space increase).

Referring to claim 21, corresponding to claim 1, Browne the system of wherein the indication of the free space available is configured in time of space available for the permanent media content instance files (Page 24 last two lines and page 25 first two lines and Figure 6 upper right hand corner teaches

Art Unit: 2614

displaying the remaining space in storage section 104 with regards to list 600 in units of time).

Referring to claim 22, corresponding to claim 1, Browne teaches the system, wherein the free space indication is unaffected by writes to and deletions from the buffer space (Page 7 fourth paragraph teaches a FIFO buffer element 104c which is part of element 104 but a separate allocation, and Figure 3 element 305 teaches the portion of the total hard drive space being used for buffer space; Page 8 lines 6-8 teaches storage section 104 being separate from the FIFO buffer element 104c and section 104 is related to program list 600, Page 24 last two lines and page 25 lines 1-2 teach indicating the space left in storage section 104, Since the FIFO buffer 104c is separate from the storage area 104 then the writes and deletions in a FIFO buffer will not effect the free space indication).

Referring to claim 24, Browne teaches a method for managing the allocation and storage of media content instance files in a hard disk of a storage device coupled to a media client device in a subscriber television system, comprising:

a memory for storing logic (Page 14 lines 7-8 teach a controller element 105 in Figure 1 having memory and Page 18 lines 1-6 and Figure 2-11 teaches the controller operating the remote device which would have to be done with a program or logic of some kind);

Art Unit: 2614

a buffer space in the hard disk for buffering media content instances as buffered media content instance files (Page 20 last paragraph);

and a processor (Page 13 third paragraph) configured with the logic to track the size of permanent media content instance files and the buffered media content instance files to provide an indication of available free space, such that the indication is independent of the buffer space (Page 24 last two lines and page 25 first two lines and Figure 6 upper right hand corner teach an indication of free space in storage section 104 and Page 7 last paragraph teaches a FIFO buffer element 104c being implemented and programs that are retained are moved to storage 104, so the available free space is separate from the buffer space).

Referring to claim 25, corresponding to claim 24, see rejection of claim 2.

Referring to claim 26, corresponding to claim 25, see rejection of claim 3.

Referring to claim 27, corresponding to claim 25, see rejection of claim 4.

Referring to claim 28, corresponding to claim 25, see rejection of claim 5.

Referring to claim 29, corresponding to claim 24, see rejection of claim 6.

Referring to claim 30, corresponding to claim 24, see rejection of claim 7.

Referring to claim 31, corresponding to claim 24, see rejection of claim 8.

Referring to claim 32, corresponding to claim 24, see rejection of claim 9.

Referring to claim 33, corresponding to claim 24, see rejection of claim 10.

Referring to claim 34, corresponding to claim 24, see rejection of claim 11.

Referring to claim 35, corresponding to claim 24, see rejection of claim 12.

Referring to claim 36, corresponding to claim 24, see rejection of claim 13.

Referring to claim 37, corresponding to claim 24, see rejection of claim 14.

Referring to claim 41, corresponding to claim 24, see rejection of claim 18.

Referring to claim 42, corresponding to claim 24, see rejection of claim 19.

Referring to claim 43, corresponding to claim 24, see rejection of claim 20.

Referring to claim 44, corresponding to claim 24, see rejection of claim 21.

Art Unit: 2614

Referring to claim 45, corresponding to claim 24, see rejection of claim 22.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne (WO 92/22983) in view of Rakib (U.S. 2002/0019984 A1).

Referring to claim 15, corresponding to claim 1, Browne teaches, wherein the processor is further configured with the logic to buffer digital media- media content instances, received at a communications interface from a remote server, as digitally compressed media content instances, but fails to teach media instances are media-on demand from a remote server.

Rakib teaches media instances are media-on demand from a remote server ([0057] teaches a gateway that contains memory element 114 in Figure 5 which can record video and audio programs, and [0094] teaches delivering VOD to customers, Figure 6 teaches element 282 a VOD sever farm).

Art Unit: 2614

At the time the invention was made it would have been obvious for one skilled in the art to modify the recording of digital media function/device of Browne with the delivery of video-on-demand function/device of Rakib for the purpose of being able to record programs that are not being broadcast on a cable broadcast channel.

Referring to claim 38, corresponding to claim 24, see rejection of claim 15.

Claim 16, 17, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne (WO 92/22983) in view of Radha et al. (U.S. 6501397 B1).

Referring to claim 16, corresponding to claim 1, Browne teaches the system of wherein the processor is further configured with the logic to buffer digital media content instances (Page 13 third paragraph teaches a processor that allows for control of the recording unit), received at a digital communications port (Page 9 second paragraph teaches the input signal can be from a digital source), as digitally compressed media content instances (Page 11 second paragraph teaches receiving digitally pre-compressed signals and passing them to storage 104), but fails to teach receiving from a local network.

Radha teaches receiving from a local network (Column 7 lines 4-16 teaches a system receiving video/audio from a local area network)

Art Unit: 2614

At the time the invention was made it would have been obvious for one skilled in the art to modify the recording of digital media function/device of Browne with the digital local network function/device of Radha for the purpose of being able to transfer stored recorded video/audio from a first digital device on a network to a second to free up memory space on the first digital device and also allow for the viewing of the video/audio data.

Referring to claim 17, corresponding to claim 1, Browne teaches the system wherein the processor is further configured with the logic to buffer digital media content instances (Page 13 third paragraph teaches a processor that allows for control of the recording unit), received at a digital communications port from a device (Page 9 second paragraph teaches the input signal can be from a digital source and a VCR), as digitally compressed media content instances (Page 11 second paragraph teaches receiving digitally pre-compressed signals and passing them to storage 104), but fails to teach the device is a digital local device.

Radha teaches the device is a digital local device (Column 6 lines 64-67 and Column 7 lines 1-3 teaches a set-top box and a digital video recorder that can be part of the same system, so the digital video recorder is the input device to the digital communications port).

At the time the invention was made it would have been obvious for one skilled in the art to modify the recording of digital media function/device of Browne with the digital local device/function of Radha for the purpose of being

Art Unit: 2614

able to store recorded video/audio data in the system that allows the video/audio to then be displayed on a display screen.

Referring to claim 39, corresponding to claim 24, see rejection of claim 16.

Referring to claim 40, corresponding to claim 24, see rejection of claim 17.

Claims 23 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne (WO 92/22983) in view of Rakib (U.S. 2002/0019984 A1) further in view of Radha et al. (U.S. 6501397 B1).

Referring to claim 23, Browne teaches a system for managing the allocation and storage of media content instance files in a hard disk of a storage device coupled to a media client device in a subscriber television system, comprising: a memory for storing logic; a buffer space in the hard disk for continuously buffering media content instances as buffered media content instance files; and a processor configured with the logic to track the size of permanent media content instance files and the buffered media content instance files, wherein the processor is further configured with the logic to provide a user interface, responsive to a user input, wherein the user interface provides the indication of available free space for permanently recording media content instances, wherein the permanently recorded media content instances are configured as the permanently recorded media content instance files, wherein

Art Unit: 2614

the permanently recorded media content instance files can be deleted from the storage device, wherein the user input is implemented with a remote control device, wherein the permanently recorded media content is from the buffer space, wherein the permanently recorded media content is a scheduled recording initially written to non-buffer space, wherein the permanently recorded media content is a scheduled recording initially written to non-buffer space, wherein the buffer space, the available free space, and permanently recorded space are located on the hard disk, wherein the buffer space and permanently recorded space are allocated from the free space on the hard disk, wherein the buffer space and permanently recorded space have physical locations on the hard disk, wherein the buffer space and the available free space is measured in units of hard disk space, wherein the processor is further configured with the logic to buffer analog broadcast media content instances, received at a communications interface, as digitally compressed media content instances, wherein the processor is further configured with the logic to buffer an analog signal received at a connector from a consumer electronics device, as a digitally compressed media content instance, wherein the processor is further configured with the logic to buffer digital broadcast media content instances, received at a communications interface, as digitally compressed media content instances wherein the processor is further configured with the logic to determine the available free space after subtracting buffer space capacity from total disk space, wherein the processor is configured with the logic to reduce the available free space by the amount of the space used for the permanent media content

Art Unit: 2614

instance files, wherein the processor is configured with the logic to increase the available free space by the amount of the space recovered from a deleted permanent media content instance files, wherein the indication of the free space available is configured in time of space available for the permanent media content instance files, wherein the processor is further configured with the logic to provide the user interface that provides an indication of available free space, such that the indication is unaffected by writes to and deletions from the buffer space (See claims 1-14 and 18-22),

but fails to teach, wherein the processor is further configured with the logic to buffer digital media-on-demand media content instances, received at a communications interface from a remote server, as digitally compressed media content instances, wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local network, as digitally compressed media content instances, wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local device, as digitally compressed media content instances

Rakib teaches media instances are media-on demand from a remote server ([0057] teaches a gateway that contains memory element 114 in Figure 5 which can record video and audio programs, and [0094] teaches delivering VOD to customers, Figure 6 teaches element 282 a VOD sever farm).

Art Unit: 2614

At the time the invention was made it would have been obvious for one skilled in the art to modify the recording of digital media function/device of Browne with the delivery of video-on-demand function/device of Rakib for the purpose of being able to record programs that are not being broadcast by a cable or broadcast company.

Radha teaches receiving from a local network (Column 7 lines 4-16 teaches a system receiving video/audio from a local area network)

At the time the invention was made it would have been obvious for one skilled in the art to modify the recording of digital media function/device of Browne with the digital local network function/device of Radha for the purpose of being able to transfer stored recorded video/audio from a first digital device on a network to a second to free up memory space on the first digital device and also allow for the viewing of the video/audio data.

Radha teaches the device is a digital local device (Column 6 lines 64-67 and Column 7 lines 1-3 teaches a set-top box and a digital video recorder that can be part of the same system, so the digital video recorder is the input device to the digital communications port).

At the time the invention was made it would have been obvious for one skilled in the art to modify the recording of digital media function/device of Browne with the digital local device/function of Radha for the purpose of being

Art Unit: 2614

able to store recorded video/audio data in the system that allows the video/audio to then be displayed on a display screen.

Referring to claim 46, see rejection of claim 23.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter C. Wilder whose telephone number is 571-272-2826. The examiner can normally be reached on 8 AM - 4PM Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600